Analysis of the Media Communication Path of Mobile Reading Platform in Digital Library

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Abstract: With the development of digital technology and the popularization of computer products and the Internet, the number of college students who use computers, mobile phones and other network electronic terminals to receive and read network electronic information is gradually increasing. New media information attracts college students because of its diverse information forms, infinitely rich content and instant process interaction, which makes them read and communicate more conveniently and get in touch with social hot issues in a timely and extensive manner. With the popularization and application of wireless network, the mobile service of digital library, as a new library service mode, is getting more and more attention, and the library service is undergoing great changes. In this paper, based on the media communication path of the mobile reading platform of digital library, the university library must change its own way according to students' reading needs, expand new ways and service channels on the basis of continuing to provide traditional reading ways, and carry out mobile reading work with the core of meeting users' information needs.

1. Introduction

With the development and popularization of information technology, digital reading has become an important study and lifestyle for students. According to statistics, in 2012, the contact rate of Chinese citizens' digital reading methods (Internet online reading, mobile phone reading, e-reader reading, CD reading, PDA/MP4/MP5 reading, etc.) reached 40.3%, and nearly half of the citizens started. Digital reading [1]. In addition, the national national reading survey also found that in the activities that netizens engage in online, more and more netizens pay attention to the function of information acquisition, and 97.9% of netizens said that they have performed reading-related activities when they go online [2]. Based on this, domestic and foreign libraries have begun to actively commit to providing schools with digital services based on the mobile Internet. At present, the development of digital reading in library is slow, and the communication mode relies too much on the LAN of library, which affects the user experience of readers. Therefore, in the construction process of the library in the new era, only by actively exploring new ways of digital reading, improving the efficiency of library literature resource sharing, establishing good communication channels, and realizing the qualitative leap of library digital reading, can we fundamentally improve the service efficiency of digital reading and promote the development process of the library [3]. The content and types of information are becoming increasingly complicated, and more and more information needs to be stored and disseminated. Digital libraries can provide users with convenient services that are not limited by time and space [4]. With the development of contemporary Internet technology, digitalization has promoted the development of all walks of life in China. With the advancement of the "internet plus" environment, it represents the continuous development and innovation of knowledge popularization in Chinese grass-roots libraries [5]. With the advent of digital reading service, how to promote the construction of knowledge informatization with the help of digital reading service is a key and difficult problem in the construction of digital reading in contemporary libraries.
2. Digital Library Mobile Reading Platform

2.1. Characteristics of Digital Library

The digital library is a scalable network knowledge management system based on the network environment. It is a digital information resource with a variety of media contents. It involves the whole process of processing, storage, retrieval, transmission and utilization of information resources. Digital books The library can provide users with convenient, fast and high-level information services [6]. Digital library is not a physical library. From the concept itself, it can be understood as two connotations: one is to convert paper books into e-books through digital processing, and the other is the storage, exchange and circulation of e-books [7]. The digital library draws lessons from the traditional library's resource organization mode, uses content classification and retrieval methods, and processes and arranges information through network technology, so that users can use it without space restrictions. Generally speaking, a standardized digital library should be built on a complete management software system, which can be divided into five modules: information acquisition and creation, storage and management, access and query, dynamic publishing and authority management [8]. In short, it is the maintenance management and user service of the digital library. The basic structure of the digital library is divided into three parts: the portal layer, the service layer and the resource layer. As shown in Figure 1.

![Figure 1 Basic structure diagram of digital library](image)

2.2. Mobile reading

Mobile reading refers to reading electronic resources anytime and anywhere by using tablet computers, mobile phones, PDAs and other mobile devices as reading tools. From the perspective of mobile reading terminals, 92.09% of users are using mobile phones to read. In 2011, there were nearly 300 million active users in China's mobile reading market, with a year-on-year growth rate of more than 30%. Mobile reading based on mobile phones has become the mainstream demand of current reading. From the reading market, mobile reading, especially mobile phone reading, has become an important content in the current Internet field. There are more and more enterprises and platforms providing reading content for mobile phone users, and the number of mobile phone reading users and the market scale are growing and expanding rapidly like smart phones [9]. The emergence of digital library mobile services enables readers to retrieve library database resources through various handheld terminal devices and wireless networks anytime and anywhere, read full text online or download them. With people's increasing demand for scientific, technological and cultural information, mobile library services have become an inevitable choice for library services in the ubiquitous information society. Mobile library and mobile library are the external forms of Library mobile service. Mobile service of digital library refers to all kinds of online or offline service activities carried out by the library relying on network and multimedia technology, with the help of mobile phones, tablet computers, handheld readers and other mobile terminal devices.
Mobile services include digital reading service, mobile lending service and SMS self-service. This is based on multimedia network information technology, which combines real-time information push service with users' independent choice to provide readers with timely, convenient and personalized service. It is a "fragmented" reading service, which enables readers to enjoy the library's literature information inquiry, browsing and obtaining service anytime and anywhere.

3. The Media Communication Path of the Digital Library's Mobile Reading Platform

3.1. The Media Communication of the Mobile Reading Platform of Digital Library

The main target of the mobile reading service of the library is the vast number of readers who have library card. Compared with readers without a library card, readers with a library card can receive comprehensive and in-depth mobile reading services provided by the library. The library will also perform statistical analysis on the borrowing information of readers who have a library card to provide them with targeted services. However, readers without a card usually can only browse the home page of the library's mobile reading service platform, and can not get the corresponding resource services. For readers, the library card is the voucher for them to obtain the rich resources of the library and accept the mobile reading service of the library. At the application level, media digital library mainly provides users with professional digital resources in the field of media. In addition, it is worth emphasizing that as an important part of media asset management, the further development and deepening of these professional resources will become the development trend of media digital library in the future. How to establish a market-oriented marketing mechanism for media content assets needs to be studied in depth. The real value of written materials lies in exploiting resources to the maximum extent and finding value innovation points. In terms of operation mechanism, we can set up a peripheral expert think tank team and a professional resource development team to realize the in-depth processing and secondary creation of media digital resources. On this basis, customized services can be provided for users other than some TV stations. You can also develop resources according to the needs of users.

3.2. Library mobile reading service content

The construction of mobile reading resources is the most basic link in the development of mobile reading services. To enhance the attractiveness of its mobile reading services to readers, libraries must build comprehensive and abundant mobile reading resources. It can be seen from Table 1 that a total of 20,969 books of 27 categories were read on the WeChat official account of a certain library. These books are mainly distributed in literature, historical geography, philosophy and religion, economics, Chinese classics and other books that readers prefer to read. Some highly specialized fields, such as agricultural science, classical theory, aerospace, etc., provide fewer books for readers to read.
Table 1 Classification of Books on WeChat Official Account of a Library

<table>
<thead>
<tr>
<th>Species</th>
<th>Number of books</th>
<th>Species</th>
<th>Number of books</th>
</tr>
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<tbody>
<tr>
<td>Literature</td>
<td>3953</td>
<td>Natural Science</td>
<td>57</td>
</tr>
<tr>
<td>Historical geography</td>
<td>1104</td>
<td>Biology</td>
<td>113</td>
</tr>
<tr>
<td>Philosophical religion</td>
<td>761</td>
<td>Environmental Science and Safety Science</td>
<td>83</td>
</tr>
<tr>
<td>Economic</td>
<td>591</td>
<td>Astronomy and Earth Science</td>
<td>66</td>
</tr>
<tr>
<td>Culture, Science, Education and Sports</td>
<td>641</td>
<td>Agricultural Science</td>
<td>72</td>
</tr>
<tr>
<td>Medicine &amp; Health</td>
<td>617</td>
<td>Mathematical Sciences and Chemistry</td>
<td>58</td>
</tr>
</tbody>
</table>

Under the background of information construction, individuation has become an important feature of contemporary knowledge culture construction. In order to meet the reading needs of different personalities, ages, genders and occupational fields, libraries can understand the reading characteristics and needs of the masses by establishing personalized stacks and groups, and further improve the reading service and quality. At the same time, with the help of the digital construction background, help customers build personal and personalized files, allowing readers to select correctly according to their reading interests. The cloud reading mode is an important development technology of contemporary reading. This technology can combine readers' reading habits to help them realize data unification of multiple terminals and multiple platforms. Under the establishment of this data-based reading mode, readers can use fragmented time to read, reduce the construction cost, break the reading time and geographical restrictions. With the support of this technology, readers can experience the information and knowledge characteristics of digital reading, and achieve their reading goals in a short time.

4. Conclusions

At present, library service is facing a transformation, which gradually changes from resource-centered to user-centered. This requires libraries to take users as the center, and to meet users' information needs as the core. As a cultural institution with excellent reading resources, on the one hand, the library will still meet the needs of traditional reading students, on the other hand, it will actively adapt to the changes in reading content and reading methods of students under the new situation, launch a new mobile reading service, and work hard. Improve the reading experience of students. Mobile reading in the era of mobile Internet is a new field for libraries to develop services. It is an important symbol and specific extension of the transition from the library-centric service model to the user-centric service model. With the change of concept and the resolution of management and technical problems, mobile reading will surely become one of the most promising service methods for libraries. As a novel and special reading form, when improving the traditional paper-based reading mode, digital reading provides students with a good reading service experience on the one hand, and reduces the operating and management costs of the library on the other hand. It can be seen that digital reading is an important means to popularize knowledge at the grassroots level in China.

References


